MILWAUKEE FIRE DEPARTMENT
EXECUTIVE SUMMARY REPORT 2009

MFD Executive Summary Report 2009
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MFD INJURY DATA SUMMARY

The MFD injury data is based on the type of risk environment in which the injuries occur. The two main risk categories that injuries are grouped in are identified as emergent and non-emergent.

Emergent Environment (EE): Injuries in this category occur during a run event in the field, normally this means that the apparatus has left the firehouse, with the exception of still calls. Control measures recommended for injuries such as these are designed to minimally impede the mission and address the hazards that are within our control.

Non-Emergent Environment (NE): Injuries in this category occur during any other on duty activity, outside of a run. MFD should have greater control over the injuries risks and hazards that department personnel are exposed to in this environment.

These environmental categories do not make injuries in one group more acceptable than another. These categories guide the recommendations to more effectively mitigate exposures to department personnel.

OSHA Criteria: Statistical figures are further grouped by evaluating the activity of the firefighter and the nature of the injury at the time of injury. They are evaluated by whether the injury led to a recordable injury with lost time (LT), a recordable injury without lost time (R), or an injury that did not meet the recordable criteria for OSHA (NR). The types of activities and nature of injury selections were identified from annual reports from NFPA and statistically significant areas identified internally from MFD.

Further Data Evaluated: Additional data that is collected include the injuries that occur by firehouse and apparatus, the time of injury, age of the personnel injured, and the duty time personnel have on the job. There are also annual comparisons of category groups available in order to identify trends that may be developing.

Collection Method: Currently data is collected and calculated manually into an excel program. For accuracy and efficiency the department is moving towards an electronic reporting system that will gather data to allow select users to create specific statistical reports that can effectively be used to mitigate risk/hazard exposure for firefighters.

DASHBOARD

The dashboard provides a brief statistical synopsis of the state of injuries for MFD over the past three years. Data is compared by injuries based on OSHA recordable criteria and general activity groups that are established by National Fire Protection Association (NFPA). A three year comparison has been made. Data from the 2009 annual report comes from the Department of Employee Relations. The comparative figures for the total injuries in the tables for OSHA recordable do not zero out when compared with the DER 2009 annual report. Due to the time when data is collected and data entry corrections are made, a few cases may be submitted or counted more than once, all cases have been accounted for, the percentage of difference is less than one percent.

OSHA Recordable Injuries Emergent Environment				
	Lost Time	Total Recordable Injuries	Non-Recordable	Total
2007	163	195	292	487
2008	174	191	239	430
2009	151	167	200	367

OSHA Recordable Injuries Non-Emergent Environment				
	Lost Time	Total Recordable Injuries	Non Recordable	Totals
2007	119	127	114	241
2008	90	103	91	194
2009	100	103	91	194

INJURIES BY DUTIES IN EMERGENT ENVIRONMENT				
	FIRE	EMS	NONFIRE	RESPONDING
2007	254	181	10	42
2008	209	163	8	50
2009	188	142	5	35

DASHBOARD

INJURIES BY DUTIES IN NONEMERGENT ENVIRONMENT			
	TRAINING	OTHER ON DUTY MNTNCE	RIDING APPARATUS
2007	62	144	35
2008	29	138	26
2009	51	115	28

MFD INJURY DATA FROM DER 2009 ANNUAL REPORT					
MFD	**2007**	**2008**	**2009**	**% Change Over Prior**	**3 Yr Avg**
Claims	725	627	**566**	**-9.7%**	639
Recordable Cases	322	294	**270**	**-8.2%**	295
Incidence Rate	29.83	24.55	**22.49**	**-8.4%**	27.91
Lost Workdays	4,684	10,136	**3,625**	**-64.2%**	7,880
Injury Hours	92,937.0	107,094.4	**69,849.4**	**-34.8%**	99,540.5
Injury Pay	$1,644,679	$1,915,906	**$1,359,726**	**-29.0%**	$1,754,763

MFD EXECUTIVE SUMMARY REPORT

OBJECTIVES TO ADDRESS

- **What was the direction of progress in 2009**
- **What was the cause of improvement or regression**

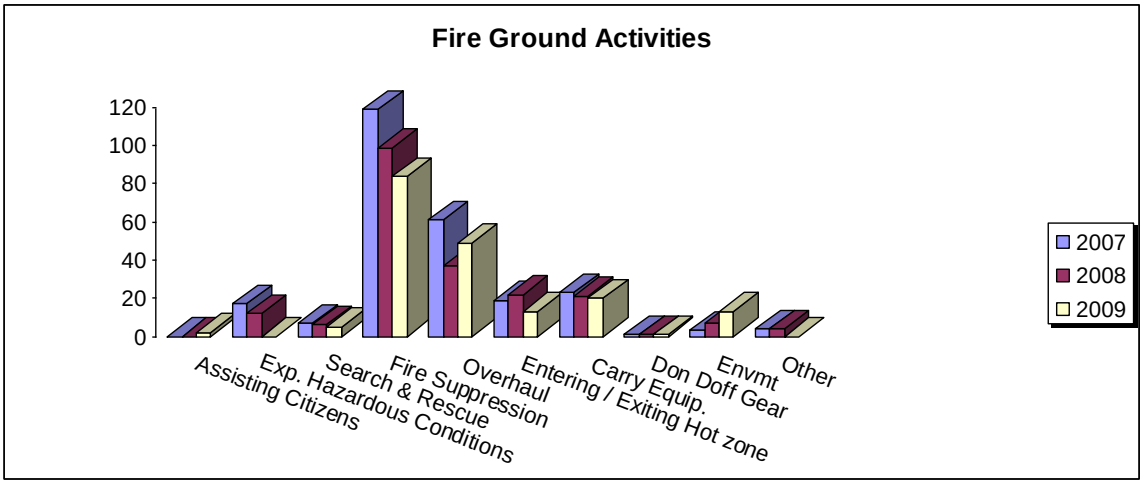
General Safety: The Milwaukee Fire Department progressed in a positive direction during the year of 2009. This can be found in the following reductions: claims (9.7%), recordable cases (8.2%), incidence rate (8.4%), lost- work days (64.2%), injury hours (34.8%), and injury pay (29%). There was a noticeable improvement in injuries occurring in the emergent environment (EE) with a 14% drop in both total cases and cases resulting in lost time. More specifically, an 11% decrease in Fire Ground Activities, and 13% decrease in EMS related duties. Injuries that occurred on the apparatuses decreased by 18% and Other on Duty Injuries fell 17%. Injuries associated with training did increase from 29 in 2008 to 50 in 2009 (76%). 33% of all firefighter injuries derived from the fire ground. 55% of all firefighter injuries were associated with strains and sprains.

It is difficult to state if the programs implemented in 2009 had a definite impact on the reduction of injuries as intended. A more effective tracking program (the electronic reporting system) is under development so that we may evaluate our control measures. Many of the control measures that were in place were designed to address specific trends that were identified from previous years. Examples would be the engineering of the EMS bags and powered cots to reduce transport injuries or department wide training to reinforce basic fire ground tactics and skills where a high rate of injuries occurred.

The MFD's direction of focus for the upcoming year is department wide accountability when assessing and addressing the health and safety of all personnel. This will be addressed in how the department trains, monitors, reports, responds, and prevents injuries in the future. The goal is to systematically identify hazards and appropriate control measures to prevent injuries and effectively manage the exposure of hazards to department personnel.

EMERGENT ENVIRONMENT

Both, the number of total cases and recordable injuries for 2009 decreased by 15% compared to 2008. The emergent injuries that resulted in lost time decreased by 16%, while 45% of all emergent injuries met the OSHA recordable criteria. There are more variables involved in incidents that occur in the emergent environment, which increase the potential for injury. Yet, with sound risk analysis and effective programs MFD is confident these figure can be reduced, which will result in department personnel being better protected.



Fire Ground Activities											
	Assisting Citizens	Exp. Hazardous Conditions	Search & Rescue	Fire Suppression	Overhaul	Entering / Exiting Hot zone	Carry Equip.	Don Doff Gear	Envmt	Other	Total
2007	0	17	7	119	61	19	23	1	3	4	254
2008	0	12	6	99	37	22	21	1	7	4	209
2009	2	0	5	84	50	13	20	1	13	0	188

Fire: Direction of Progress

Consistent with national (NFPA) and department trends (MFD), most fire fighter injuries occur on the fire ground, NFPA (45.9%) and MFD (33.2%). The majority of these injury types are strains or sprains: NFPA (49%), MFD (38% or 139 claims in 2009).

Injuries associated with fire suppression occur the most out of all fire ground injuries (45%); there was a 15% reduction from 2008. This was followed by overhaul operations

(26%), an increase of 32% from 2008. 7% of the fire ground injuries occurred when firefighters were entering or exiting the hot zone (7%), this was a 41% drop from 2008.

EMERGENT ENVIRONMENT

Nationally there is a downward trend of fire responses and fire ground injuries: between the years 1981-2008 there has been a 50% decrease in the number of fire incidents; in turn there has also been a 54% decrease in the number of fire ground injuries. While the comparative sample size is significantly smaller the trend remains consistent. MFD has had a 12% decrease in the number of fire incidents and a 26% decrease in the number of fire ground injuries since 2007.

According to the NFPA 2008 firefighter injury report: the number of fires a fire department responds to is directly related to the population protected, and the number of fire ground injuries incurred by a department is directly related to the number of fires attended. In 2008 the national average of fire ground injuries per 100 fires (FGI/100 fires) for departments that serve a population between 500,000-999,000 was 2.7 (2009 national figures are not available yet). For MFD in 2009 the figure is 4.2. While it is above the national average, it is a reduction from 4.5 in 2008. It should be noted that MFD's number of fire incidents are 51% higher than the national average, this equates a higher potential for exposure to fire ground injuries (MFD 188, National Avg 80). Midwest data for Milwaukee's population size was not available.

Fire: Causes of Improvement / Regression

Incident Safety Officer
The Incident Safety Officer's (ISO) and the training academy's preventive efforts have made a significant impact to the safety of firefighters in the field.

The role of the Incident Safety Officer is to manage the safety hazards and risks that are specific to field operations. This is done directly during fires or major events in the field, as well as through the coordination of preventive programs which are designed to address recognized hazards. There were three preventive efforts in 2009 that were implemented to address hazards that are specific to the fire ground. In many cases the department has less control over these hazards, but they can be a significant source of firefighter injuries on the fire ground. The following identify the programs:

ISO and BOZA Inspections
Through a joint effort with the Board of Zoning Appeals (BOZA), the ISO reviews construction site plans that are presented to the board. They also consult in matters of standpipes and sprinkler connection locations, sites of elevator control boxes, and means of ingress and egress for apparatuses. Construction that has to come before the Board of Zoning Appeals poses potential hazards within its design that can negatively impact the safety, or impede the operations, of firefighters during fire suppression. This input from the ISO allows inherent safety hazards to be identified and appropriately addressed before construction begins. This program started at the beginning of 2009.

EMERGENT ENVIRONMENT

ISO and Department of Services Vacant Structures:
One of the greatest challenges to managing safety on the fire ground is the hazard of the unknown. Typically this involves poor or compromised structures. Through joint efforts with the Department of Neighborhood Services, the ISO inspects vacant or condemned structures that the city has taken ownership of. The ISO inspects the structural integrity of the building and identifies potential hazards that that might not be recognized immediately by companies during a fire. They effectively communicate structure hazards in a number of formats: from face to face meetings with crews, department wide bulletins, to scheduling walkthroughs with first in companies.

ISO Placard Program:
The placard program (the program identifies abandoned structures by hazard level for firefighters) is incorporated through this effort. It is difficult to directly measure the impact of this program statistically by injuries. The department believes, through field response, these efforts have reduced firefighter exposures to some of the unknown hazards (i.e. internal structure of walls and floors) that would be experienced by firefighters. This provides sound intelligence to the incident commander, as they manage the risks on scene, thus leading to further protection of department personnel. This program was implemented in the first quarter of 2009

ISO Field Presence
One of the strongest influences that the ISO has is the consistent presence in the field. The ISOs are working with company officers and chiefs to identify safety hazards on scene. This is their sole dedicated function. The ISOs presence has been a catalyst for the successful implementation of firefighter safety programs on scene, such as the PPE Policy. This policy identifies the mandatory PPE to be donned by firefighters, by designated hazardous zones on scene. Through the respect that the ISOs have established they have become a central resource for company officers and chiefs alike to discuss and address safety hazards in the field. Having this central resource improves the chances of successful implementation of control measures. Statistically it is a challenge to directly measure where the impact is seen, but through the cultural shift toward safety in the field, reduction in fire ground injuries and the programs implemented, the department is confident in the impact that the ISOs have.

Department Wide Training
Department wide training is conducted by the Bureau of Instruction and Training (BIT). Traditionally, the training would consist of a combination of classroom and performance based evolutions. In the past training topics would address new operations, such as the implementation of the rapid intervention team (RIT) in 2007, or specific tactics training as high rise training in 2008. Department wide training can occur more than once in a year, but it typically is dependent on the obligations of the academy (if there is a recruit class, etc.)

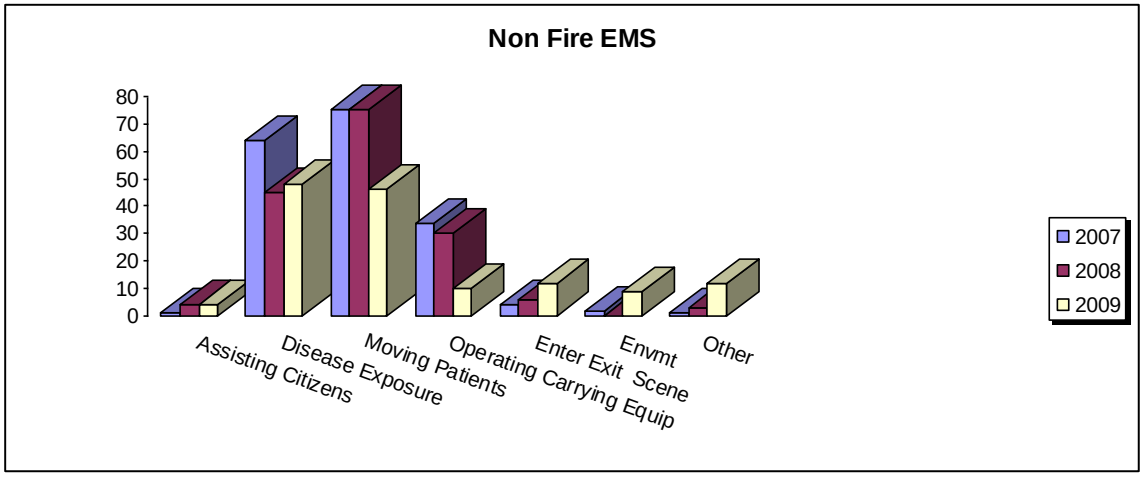
EMERGENT ENVIRONMENT

Back to Basics Training:
In 2009 the academy incorporated back to basics training with the goal to reinforce basic tactics and skills used on the fire ground. The tactics and skills addressed were believed to have been factors in many fire ground injuries, such as material handling, equipment operations, communication, technique, scene awareness, and teamwork. These areas were identified by the academy staff through observations from the ISOs and company officers, and from injury reports and data from the HSO. The evolutions selected to improve the previously identified skills and tactics were roof operations, forced entry, search and rescue strategies, hose layouts, and roof saw familiarity. These evolutions also addressed many of the fire ground activities performed in areas such as fire suppression, search and rescue, entering or exiting the hot zone. See training under the Non-Emergent section of this report for more information.

The department cannot state that the training directly reduced injuries in fire suppression, entering or exiting hot zones or search and rescue. This training was designed to address risks identified through the department risk management plan and the department believes through the reduction of injuries in said fire ground activities that the training was effective.

BIT and DNS, Company Level Training:
Through the BIT and the Department of Neighborhood Services approved, vacant city houses have been made available for company level training. This training is designed and conducted by the individual company officer. Some use this resource, others do not. It enables company officers to address crew deficiencies and reinforce strengths. In many cases these strengths and weaknesses are identified during field operations during trainings, such as the back to basics conducted at the BIT in 2009. The resource has been established for years. These efforts are designed to be tied to fire ground activities such as entering and exiting hot zones, overhaul, search and rescue, forced entry, roof operations, and fire suppression. Again, while it is difficult to measure its direct impact, its design was to provide a resource to companies that would address specific tactics and skills associated with a number of fire ground injuries.

EMERGENT ENVIRONMENT



Non Fire Emergency EMS								
	Assisting Citizens	Disease Exposure	Moving Patients	Operating Carrying Equip	Enter Exit Scene	Envmt	Other	Total
2007	1	64	75	34	4	2	1	181
2008	4	45	75	30	6	0	3	163
2009	4	48	47	10	12	9	12	141

EMS: Direction of Progress

Injuries associated with EMS operations (141 in 2009) are the highest among all non-fire emergency activities and the second highest among activities in both the emergent or non emergent environment. Consistent with national trends according to NFPA, strains and sprains is the number one injury type among all non fire ground injuries, NFPA 57%, MFD EMS strains 45%.

Disease exposure was the number one EMS injury claim with 34%. NFPA reports the national average to be .7 exposures per 1000 EMS runs, exposures for MFD is 2.7. Twenty five percent of the disease exposure claims were associated with the H1N1 virus during the month of June. Only 10% of the claims were recordable.

Dropping from the most reported EMS injury claim, Moving Patients is second with 33% of the claims, a 39% reduction (from 75-49) from 2008. 7% of all EMS injury claims derived from operating or handling equipment, a 67% decrease from 2008. Entering or exiting the scene resulted 9% of all EMS injury claims. 6% of the claims were associated with environmental conditions, specifically slips trips and falls from snow covered or icy surfaces.

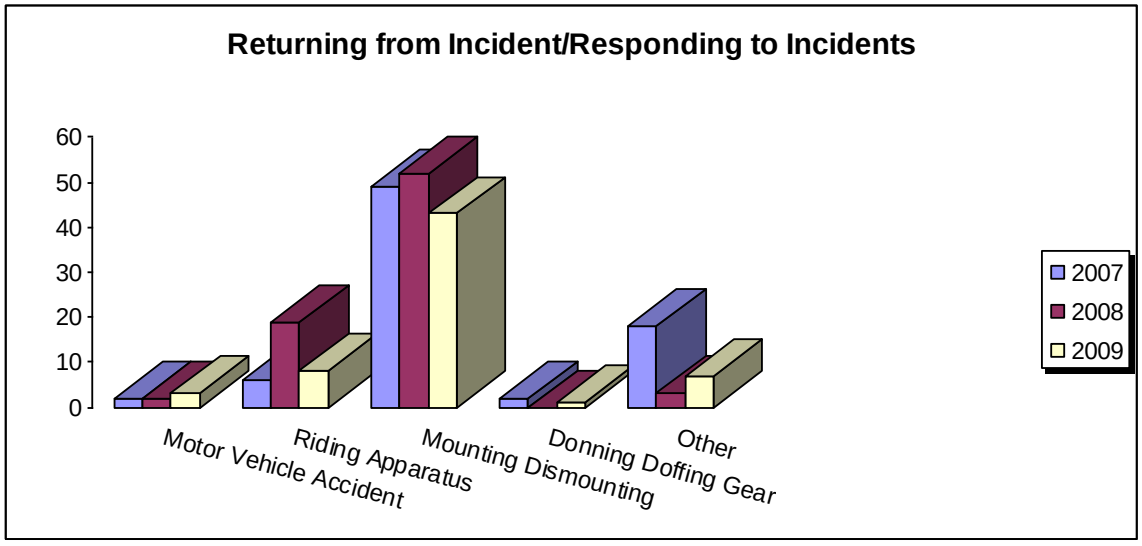
EMERGENT ENVIRONMENT

EMS: Cause for Improvement/Regression
New engineering control measures have been incorporated by the EMS bureau, which have impacted the safety of members during EMS operations.

Powered Cots
In May of 2008 the powered cots were incorporated into EMS operations in the field. After a 6 month acclimation period significant impact was made on injuries resulting from moving patients, there was 39% decrease. This can also be attributed to the new stair chairs (with tracks), and bariatric cots that were placed in the field (with training)

Separation of PFR equipment from BLS bag
In 2009, in response to increased injury reports, complaints from members, the poor integrity of the bag, and the inability to properly clean it, the EMS bureau readdressed the design of the blue BLS bag. The Paramedic First Responder equipment was separated and in 2009 there was a 68% decrease in EMS injuries resulting from carrying EMS bags. The next stage to reducing injuries associated with the handling of the BLS equipment will be to address the storage on the apparatus, providing a more ergonomically sound and safer location to access the equipment.

VEHICLE SAFETY



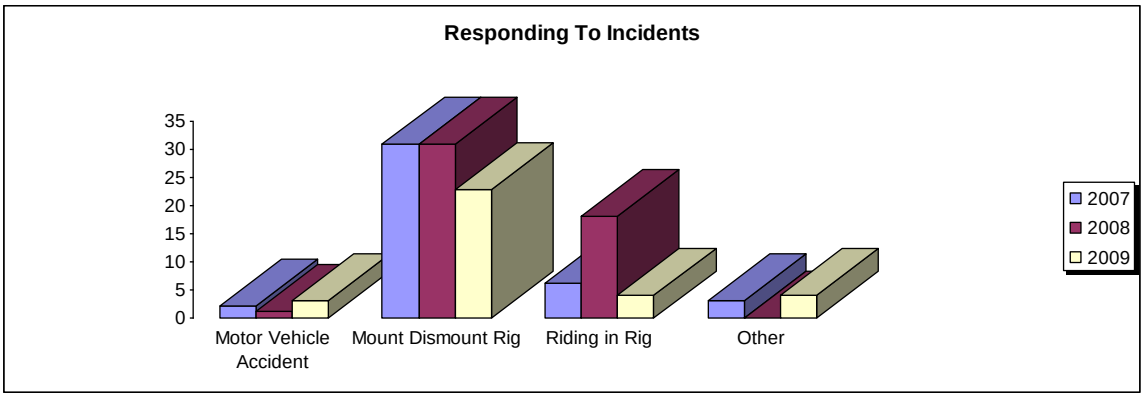
VEHICLE SAFETY

Responding to Incident/Returning from Incidents						
	Motor Vehicle Accident	Riding Apparatus	Mounting Dismounting	Donning Doffing Gear	Other	Total
2007	2	6	49	2	18	77
2008	2	19	52	0	3	76
2009	3	8	43	1	7	62

Responding to and Returning from Incidents: Direction of Progress
According to NFPA 2008 Firefighter Injury Report .1% of the 25.3 million emergency responses made throughout the country resulted in collisions. With 66,950 total responses and 94 collisions MFD is consistent with this figure (.14%). The total number of injuries that were a result of collisions, according to NFPA were .6%, MFD is .5%.

In general, as the number of responses decrease, the potential for hazard exposure decreases and there should be a fall in the number of injuries. From 2007-2008 those numbers are not as clear as they were in 2009. In 2007, 67,541 emergency responses were made with 77 total injuries associated with an apparatus. In 2008, the number of emergency responses increased by 800 (68,381), yet the total injuries connected with an apparatus remained basically the same with 76 total injuries. In 2009 total emergency responses decreased by 1,431 (66,950), at the same time total injuries also fell by 18% (76 in 2008 to 62 in 2009). More data is necessary before a direct correlation between the number of responses and total injuries connected with the apparatus could be made. It is important to understand that not all of the injuries associated with an apparatus occur during or returning from a response.

The 18 % decrease in total injuries can primarily be attributed to the fall of injuries deriving from riding in the apparatus (57% reduction) and mounting and dismounting the rig (21% reduction). Mounting and dismounting the apparatus continues to be the leading injury for vehicles (69% in 2009). Between the years 2007-2009 144 injuries occurred (emergent and non-emergent) where members were mounting or dismounting an apparatus, 80 of those 144 injuries resulted in lost time (56%). Under goals and objectives control measures will be discussed to significantly reduce these injuries.



VEHICLE SAFETY

Responding to Incident Emergent Environment					
	Motor Vehicle Accident	Mount Dismount Rig	Riding in Rig	Other	Total
2007	2	31	6	3	42
2008	1	31	18	0	50
2009	3	23	4	4	35

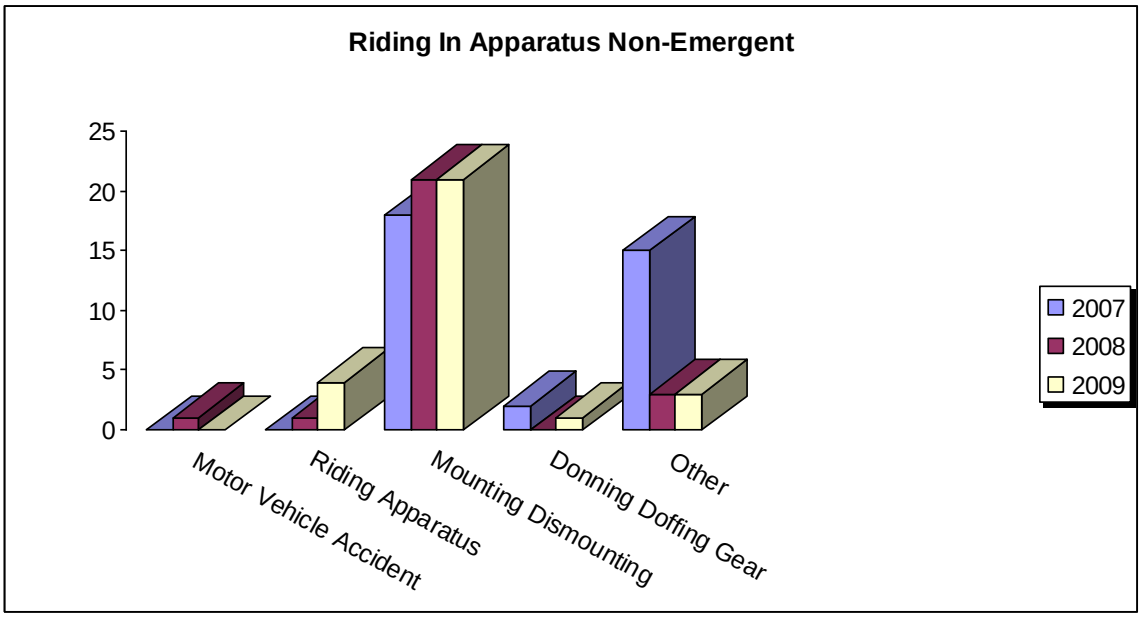
Responding to Incidents: Direction of Progress
Consistent with the activity over the past 3 years, mounting and dismounting the apparatus continues to lead all vehicular injuries associated with responding. 68% of all responding vehicular injuries were a result of mounting or dismounting an apparatus in 2009, a 26% reduction from 2008. 12% of injuries resulted from riding in the vehicle, a 67% decrease from 2008. Nine percent of injuries occurring while responding to incidents were a result of motor vehicle accidents; an increase from 1 claim to 3 in 2009, each case led to lost time. It should be noted that 60% of all injuries occurring while responding to an incident led to lost time.

A direct correlation can be made to the rise and fall of injuries on the apparatus when responding compared to the number of runs taken each year. As seen in the table below, as total runs increase the potential for hazard exposure rise as well; this can result in injuries.

YEAR	# OF TOTAL RUNS	INJURIES WHILE RESPONDING
2007	67,541	42
2008	68,381	50
2009	66,950	34

Responding to Incidents: Cause for Improvements / Regression
In this category the most significant shift in injuries was seen in the claims that derived from riding in the rigs. Individual follow up with firefighters was conducted which focused on the equipment worn while riding on the apparatus, regular maintenance, and wearing of seatbelts. Recommendations with more measurable results that can be linked to the rise and fall of these statistics are under development. They include assessing the design of seats and storage of gear. On pages 16-17 initial recommendations are provided to mitigate the hazards found in during the mounting and dismounting of the apparatus.

VEHICLE SAFETY



Returning From Incident Non-Emergent						
	Motor Vehicle Accident	Riding Apparatus	Mounting Dismounting	Donning Doffing Gear	Other	Total
2007	0	0	18	2	15	35
2008	1	1	21	0	3	26
2009	0	4	20	1	3	28

Riding in Apparatus: Direction of Progress

This category of activity consists not only of returning from incidents, but also riding in the rig during non emergent activities, such as transfers or training. Consistent with injuries from responding to incidents, mounting and dismounting the apparatus is the leading activity resulting in injuries from riding the apparatus during activities in a non-emergent environment. 55% of those injuries resulted in lost time.

- 71% of injuries occurring from riding in an apparatus resulted from mounting or dismounting the rig
- 14% occurred while members were riding in the apparatus

Riding in Apparatus: Causes for Progress and Regression

Mounting and dismounting the apparatus:
The main factors surrounding this type of injury are material handling (EMS and other items that are carried off the rig simultaneously as the firefighter dismount), awareness of surroundings (what are the conditions of the surface the fire fighter is about to step on),

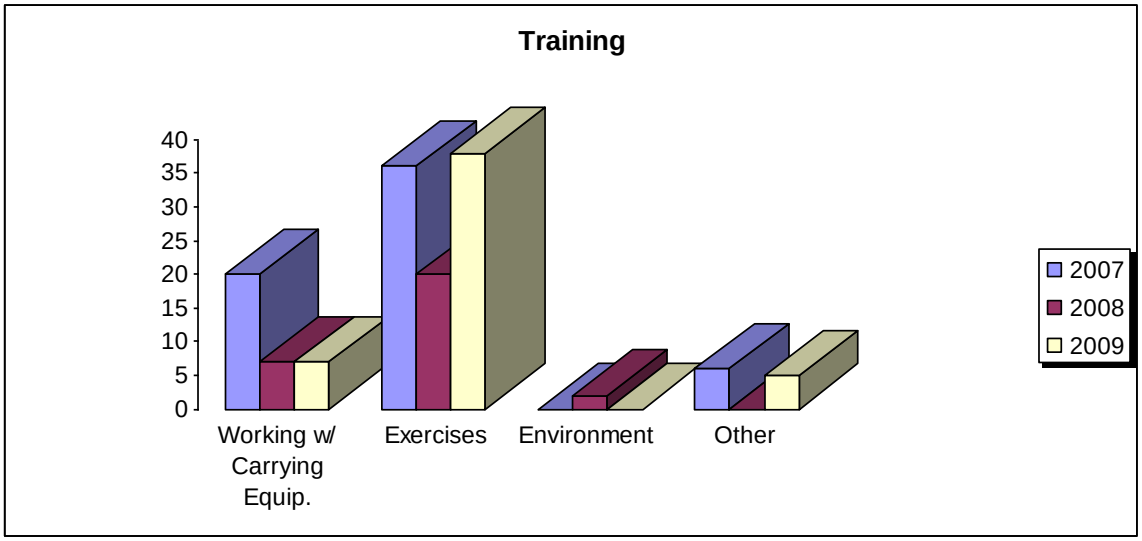
and the ability to maintain three points of contact while getting on or off of the rig. Emphasis through training and accountability on maintaining three points of contact at all times, dismounting with the back facing out, minimizing the equipment in hand while dismounting or mounting. These can all lead to a significant reduction in this injury. The implementation of daily training in the firehouses, to begin in 2011, is the perfect venue to address this hazard.

It is also appropriate to assess the accessibility to the apparatus that the vehicle step design provides, in regard to injury prevention. Starting in 2010 we can track the apparatus code with all injuries associated with vehicles. In addition it will also be important to readdress what items are stored in the rigs versus outside compartments. This belief is that this will reduce the equipment managed while dismounting the apparatus, the flying hazards in the vehicle, and lifting injuries associated removing equipment out of the cabs of the apparatus.

NON-EMERGENT SAFETY

Non Emergent OSHA Recordable Injuries				
	Lost Time	Total Recordable Injuries	Non Recordable	Totals
2007	114	114	127	241
2008	93	105	89	194
2009	101	103	90	194

Neither the number of total claims nor recordable injuries in the non-emergent environment changed significantly. The non emergent injuries that resulted in lost time increased by 8%. 53% of all non-emergent injuries met the OSHA recordable criteria. This is significant because non emergent injuries are the type that the MFD, as a department, should have the greatest control over. Recordable injuries indicate that the severity of the injury was serious enough that department personnel required care beyond the scope of first aid.



NON-EMERGENT ENVIRONMENT

Training					
	Working w/ Carrying Equip.	Exercises	Environment	Other	Total
2007	20	36	0	6	62
2008	7	20	2	0	29
2009	7	39	0	5	51

Training: Direction of Progress
According to the NFPA firefighter injury report, 10% of all firefighter injuries were related to training. MFD has similar statistics with 9% of the total firefighter injuries occurring as a result of training. The most significant figure is the 90% increase, in 2009 from 2008, in injuries during training exercises. This statistic does not distinguish between the different training activities conducted within the department, which will be further explained.

Out of the 51 injuries that were associated with training in 2009 45% met the OSHA recordable criteria, all led to lost time. 76% of the training injuries occurred during exercise drills (evolutions), while14% resulted when equipment was handled.

The following are the department sponsored performance based training activities conducted throughout the year:

Department Wide Training, run by the BIT	Recruit Training, conducted by the BIT
Company Level Training, run by the CO	Special Teams: Dive, HAZMAT, HURT

As mentioned earlier in the section discussing fire ground injuries, the BIT annually conducts department wide training. Traditionally it is held in March. If the schedule allows, additional training may be conducted later in the year. In 2009, the BIT conducted a back to basics training session for the department titled “March Madness”. This training addressed the following hazards that were previously identified:

- strains and sprains from material handling equipment such as hoses, ladders, simulation dummies, and roof saws,
- Struck by object from forced entry evolutions
- Slip, trips, falls, and scene awareness in the confidence course or down the stairs in the tower during fire suppression and search and rescue operations

NON-EMERGENT ENVIRONMENT

Scheduling of recruit training is subject to the staffing needs of the department and the available budget. In 2008 there were no recruit classes compared to the two held in 2010. Company level training has been subject to the scheduling of the company officer. Topics can range from a table top review of an event, operational review of equipment, or performance based training such as roof operations, overhaul, or hose layout. Special teams training is held monthly and normally consists of a lecture and a performance based component. The majority of injuries that occur during special teams training come from the Dive and HURT team. Typically this involves operating or carrying some form of equipment or lifting of personnel.

From 2007-2009, on average, 46% of the training injuries occurred during department wide training. In 2007 two department wide trainings were conducted, the introduction to the Rapid Intervention Team, and the SCBA confidence course. This resulted in 31 injuries. In 2008 high rise training was conducted at Convent Hill during March. Six injuries occurred during that exercise. In 2009 back to basics training "March Madness" was conducted at the BIT. 25 injuries were reported to have occurred during this training. The rest of the injuries are accounted for in special teams, company level, and recruit training respectively; injuries were also identified during fire boat and vehicle ops training.

Training: Causes for Progress / Regression

Correlation between the number of annual training exercises and training injuries:
When analyzing the number of training exercises per year as an indicator to the number of training injuries that would be incurred in a year, a clear correlation is difficult to make. While in 2008, the year with the fewest training injuries, there was only one department wide training and no recruit class. In 2009 the injury statistics nearly doubled. In that year there was only one department wide training, the same special teams trainings, and while there was a recruit class, it only accounted for one injury. There must be another correlation to consider.

Live exercises versus walk-thrus
One theory, which may explain the decreased injuries in 2008, is the speed at which the performance based training is conducted. During the high rise training at Convent Hill instructors conducted the exercise at a reduced "walk-thru" pace, which was unlike the trainings that were held prior or after. If this continues to be the main difference in the training, then it will be important to assess the pros and cons of conducting this type of training at modified speeds. The question has to be answered if training at half speed (which reduces injuries) is better than training at live speeds (which simulate real life scenarios where the skills and techniques are going to be used). This decision is going to continue to remain at the discretion of the BIT. There are certain scenarios where simple procedural changes occur and a walk-thru can yield the same benefits of training without the additional hazard of live speeds. There are additional contributing factors that have been identified for the injuries that occurred in training.

NON-EMERGENT ENVIRONMENT

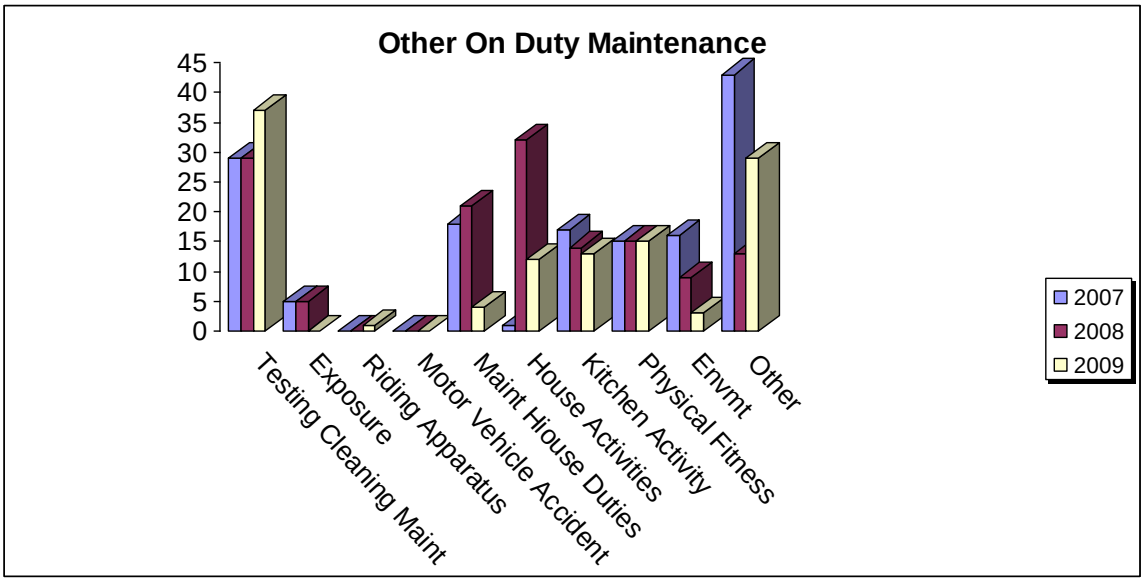
Fitness of members

Through a general overview of the injuries suffered in 2009, the fitness of our membership has become an overwhelming concern. 55% of all non fire ground related injuries were related to strains and sprains; this is consistent with NFPA survey results from 2008 as well. Strains and sprains are associated with strength and flexibility. In order to address this injury type appropriately engineering controls and procedures should be in place to ensure that the load that must be managed by members is minimized whenever possible. Firefighters still must be able to maintain a level of fitness and flexibility that will allow them to handle the daily hazards they are exposed to safely. Through the American Council of Exercise, International Association of Firefighters and Fire Chiefs the wellness fitness initiative was developed to address these concerns. This will be further addressed in the goals and objectives that are attached at the end of the report.

Accurate reporting

Through the analysis of injury reports it was determined that there were a number of members that came to training already injured, but the report had not been filed yet. During the course of training the previously suffered injury would be exacerbated and the firefighter would submit the claim stating that training was the activity that led to the injury. The challenge is that if injuries are not reported accurately and in a timely manner, addressing the actual sources of injury to prevent them in the future, becomes nearly impossible.

NON-EMERGENT ENVIRONMENT



Other On Duty Maintenance & Inspection											
	Testing Cleaning Maint.	Exposure	Riding Apparatus	Motor Vehicle Accident	Maint. House Duties	House Activities	Kitchen Activity	Physical Fitness	Envmt	Other	Total
2007	29	5	0	0	18	1	17	15	16	43	144
2008	29	5	0	0	21	32	14	15	9	13	138
2009	37	0	1	0	4	12	13	15	4	29	114

Other on Duty Maintenance: Direction of Progress

Similar with national trends identified by NFPA 18% of firefighter injuries are associated with Other on Duty Maintenance and Inspection activities, MFD (20%). Activities performed in this area are also referred to as "firehouse injuries". It is encouraging to see a decrease in injuries associated with house activities and house duties.

Injuries occurring as a result of house activities resulted in a 62% decrease. These are general activities around the fire house that are not associated specifically with a duty, ie: lifting a backpack off of a high shelf and suffering a back strain. Injuries associated with house duties resulted in an 81% reduction, these are assigned house tasks such as morning clean up, lawn care or snow removal.

A continued area of focus must be with the testing, cleaning and maintenance of equipment. This resulted in 32% of the injuries experienced during Other on Duty Maintenance and Inspection activities, a 22% increase in injuries from 2008. While there was not an increase in injuries associated with physical fitness (13%) and kitchen activity

(11%), over the past 3 years there has not been a significant decrease either. It should be noted that 24% of all lost time injuries in 2009 resulted from Other on Duty Maintenance activities. Examples of this type of injury ranged from back strains, lifting equipment, such as generators, hoses or cylinders, to splashes, burns, struck by object and slips while performing maintenance on equipment.

Other on Duty Maintenance: Causes for Progress or Regression

Testing Maintenance and Inspections:
Through the analysis of injury claims, clear, standardization of certain processes should prove effective in identifying and reducing common hazards associated with the testing, maintenance, and inspection of equipment. Material handling is the main hazard identified with many of the injuries noted, a Job Safety Analysis (JSA) is designed to address this. A JSA is a method that can be used to identify, analyze and record the steps involved in performing a specific job, the existing or potential safety and health hazards associated with each step, and the recommended action(s)/procedure(s) that will eliminate or reduce these hazards and the risk of a workplace injury or illness.

Having clear procedures should minimize the randomness of injuries in this area, because firefighters are following set procedures. It will enable MFD to organizationally implement control measures when a hazard is identified. It provides a guidance to follow for safe and effective usage, training and enforcement purposes. It would be appropriate to have job safety analyses that address the equipment design and feature. This would facilitate an understanding, by all personnel, of the safety hazards and control measures to minimize member exposure. This reinforces safe practices for all members.

A new company and battalion based safety training program is being developed. It will address safety hazards on a daily basis. The above mentioned control measures will be incorporated in this venue.

House duties and House activities:
The maintenance of house duties and house activities can be assessed together for the significant reduction in injuries within these task categories. The department believes that one of the most influential control measures to reducing these injuries was in the manner that the claims were being reported. The exact number of claims that this affected was not tracked in 2009. It is noted that between 2008 and 2009 the number of total claims did not change, yielding the idea that all of the said hazards were not reduced, but rather were categorized more accurately.

In the previous years there were a number of sudden or acute strains that occurred from a variety of normal daily activities, whether it was lifting a tool box or walking down stairs.

NON-EMERGENT ENVIRONMENT

These are activities that appeared to have been performed correctly and that should not have led to the severe injury that was suffered. Through further follow up with these cases it was found that there were injuries that occurred prior, but were not documented. The random act that was reported as a cause to the injury simply aggravated the symptoms.

Normally the firefighter was trying to deal with the pain and see if it would subside before reporting. This led to a number of cases where recommending appropriate control measures to reduce the exposure to the identified hazards difficult. The Health and Safety Officer has worked with the Local 215 vice president to improve on the quality of injury reporting in 2009. Accurate reporting allows the department to address the actual hazard with control measures that are appropriate for implementation into fire department operations. Over half of the claims in 2009 involved some form of material handling. This trend continued in 2010 and must be a focus for 2011. 32% of the claims were recordable injuries.

Physical fitness:
As with training, physical fitness is a necessary component of a firefighter's arsenal if they are to be safe and effective. The number of injuries suffered while exercising has remained consistent over the past three years (15 per year). Typically these injuries result in a strain or sprain. Strains and sprains are a result of a deficiency in either strength or flexibility. Proper stretching, form, load management, exercise programs, and standardization of equipment are essential to reducing these injuries. Appropriate fitness training on safe use of exercise equipment, proper warm up and stretching exercises, as well as effective training recommendations should come from the Peer Fitness Trainers. The MFD believes, through other fire department's worker's comp reports after a fitness program was implemented, that this recommendation should have a direct impact on fire fighter fitness as well as injury reduction. It is also in accordance with the recommended guidelines of the IAFF/IAFC Wellness Fitness Initiative. In May of 2010 the MFD applied for federal funding to implement this program in 2011.

Currently, there are only 4 firehouses that have any fitness equipment that was department funded. The majority of the equipment is acquired through donations from local businesses or house dues. This normally means that the equipment is going to be used or of less than commercial grade quality. In order to prevent injuries while exercising, the person must know how to safely use the equipment and the equipment must be in good condition. This is difficult to manage with equipment coming from so many different sources. The equipment should be provided by the department. This ensures the equipment is safe and well maintained. It also ensures firefighters are familiar with the fitness equipment at any firehouse they work at; this promotes safer use and more effective results.

NON-EMERGENT ENVIRONMENT

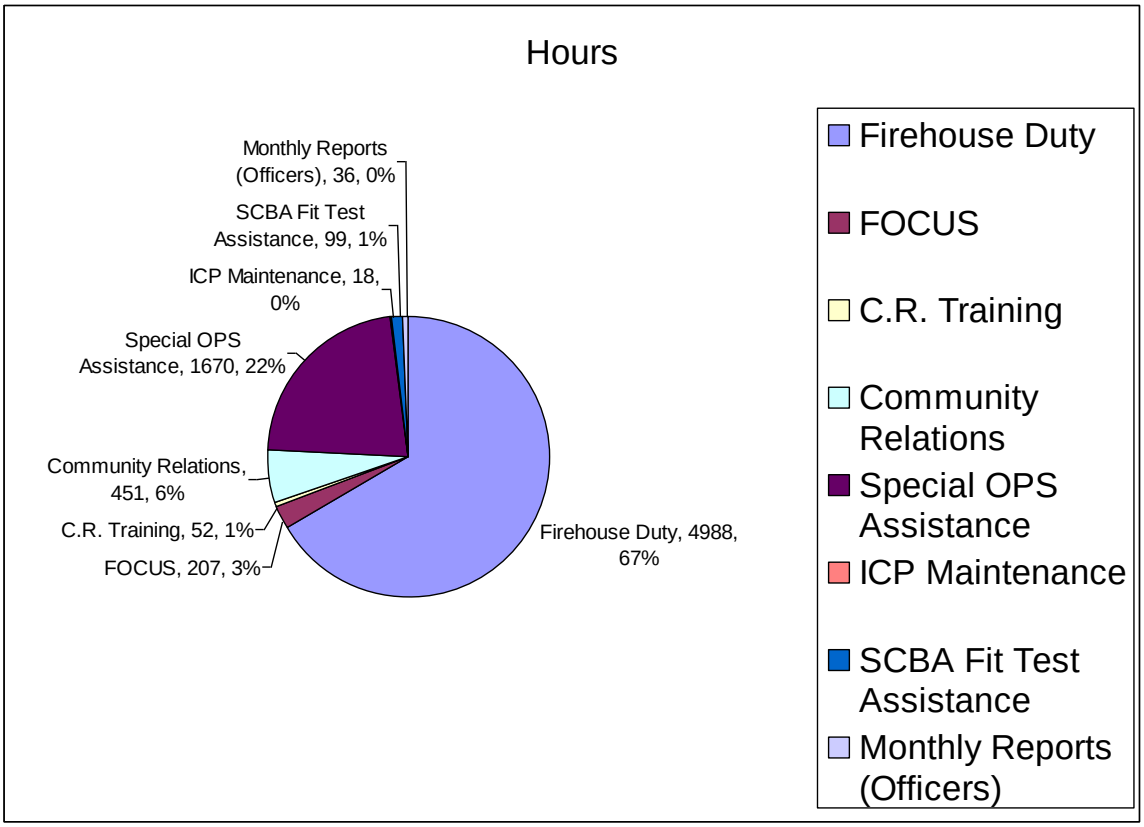
Kitchen Activities:
As with injuries resulting from exercise, injuries that occur from kitchen activities have remained consistent over the past three years (6.3 per year). In 2009 six injuries led to lost time. The nature of injuries is burns and lacerations. They typically occur during food preparation or the washing of dishes. Reminders of safe operations with culinary tools are appropriate and proper PPE for food preparation will be incorporated in the daily training topics for 2011.

SAFETY GOALS & OBJECTIVES FOR 2010/2011

The MFD already sees the benefits from engineering and administrative control measures. These are found in equipment upgrades from EMS, the Return to Work Program, and operations and programs from the department safety officers. The future goals that are established will focus on department wide accountability of the health and safety hazards that firefighters are exposed to on a daily basis. The following are the main safety goals for 2011. Further description is provided in the attached goals and outcomes:

- Modify the injury reporting and hazard identification system
- Develop a wellness program for all firefighters, this includes a formalized fitness program, and annual physicals
- Formalize the structure of the Peer Support Team
- Update the Infectious Disease Prevention Policy
- Develop and implement the new safety training calendar and program for 2011
- Incorporate the updated injury analysis protocol in department operations

RETURN TO WORK



Duties	Hours
Firehouse Duty	**4988**
FOCUS	**207**
Community Relations Training	**52**
Community Relations	**451**
Special OPS Assistance	**1670**
ICP Maintenance	**18**
SCBA Fit Test Assistance	**99**
Monthly Reports (Officers)	**36**
Total Hrs	**7521**

Return To Work Program: Direction of Progress

MFD has begun tracking the participation of firefighters in the RTW program as of May 2010. Currently the department tracks the number of participants, tasks conducted, and hours of performance. In the future the number of program hours based off of injuries will be tracked.

- 48 firefighters participated in the RTW program between May and August 2010
- 7,521 hrs of injury leave have been saved
- 67% of activity is in the firehouse
- There are two challenges that logistically impede the success of RTW program
    - Finding jobs for people under the guidelines of their restrictions
    - Being able to manage firefighters schedule
    - Commit to a set block of time on a project without being interrupted by medical or rehab appointments
- One of the project goals for 2010 is to work with Dr. Adlam and the medical providers to be able to logistically schedule appointments
    - This will ease the ability to commit personnel to set tasks